WHAT IS CLAIMED IS:

1. A method of modifying cytotoxic T cells while retaining the cytotoxicity of the cells comprising the steps of:

(a) culturing said cells in an effective amount of IL-15;

(b) culturing the IL-15 stimulated cells in an effective amount of IL-2; and

(c) optionally repeating steps (a) and (b) a selected number of times, wherein said modified cells demonstrate a change in at least one characteristic selected from the group consisting of increased proliferation, differentiation, growth, phenotype, adhesion molecule expression, biodistribution, cytokine production profile, level of cytotoxic activity, and tumor target spectrum.

2. The method according to claim 1 wherein said cytotoxic T cells are TALL-104 cells.

3. The method according to claim 1 wherein said cytotoxic T cells are TALL-103/2 cells.

4. A method of modifying a cytotoxic T cells while retaining the cytotoxicity of the cells comprising the steps of:

(a) culturing said cells in an effective amount of IL-2;

(b) culturing the IL-2 stimulated cells in an effective amount of IL-15 and

(c) optionally repeating steps (a) and (b) a selected number of times, wherein said modified cells demonstrate a change in at least one characteristic selected from the group consisting of increased proliferation,

differentiation, growth, phenotype, adhesion molecule expression, biodistribution, cytokine production profile, level of cytotoxic activity and tumor target spectrum.

5. The method according to claim 4 wherein said cytotoxic T cells are TALL-104 cells.

6. The method according to claim 5 wherein said cytotoxic T cells are TALL-103/2 cells.

7. A method of modifying TALL-104 cells comprising:

culturing TALL-104 cells in an effective amount of IL-15, wherein said cells grow at a rate faster than when stimulated by IL-2, and have an altered phenotypic, cytotoxic and cytokine profile.

8. The method according to claim 7 wherein said modified cells have an increased level of cytotoxicity.

9. The method according to claim 7, wherein said modified cells demonstrate a change in a characteristic selected from the group consisting of increased proliferation, differentiation, growth, phenotype, adhesion molecule expression, biodistribution, cytokine production profile, and tumor target spectrum.

10. The method according to claim 9 wherein said cytokine profile comprises increased expression of a cytokine selected from the group consisting of IL-10, GM-CSF, TNF-α and TNF-β

11. The method according to claim 9 wherein said cytokine profile comprises decreased expression of gamma interferon.

12. The method according to claim 9 wherein said phenotype comprises increased expression of the cytotoxic adhesion/activation marker CD56.

13. The method according to claim 9 wherein said phenotype comprises decreased expression of the adhesion molecule CD38.

14. A method for increasing the levels of cytotoxic activity and spectrum of tumor target recognition and growth of TALL-103/2 cells comprising culturing TALL-103/2 cells in an effective amount of IL-15, wherein said cells grow at a rate faster and have an expanded target cytotoxicity than when stimulated by IL-2.

15. The method according to claim 14, wherein said modified cells demonstrate a change in a characteristic selected from the group consisting of increased proliferation, differentiation, growth, phenotype, adhesion molecule expression, biodistribution, cytokine production profile, and tumor target spectrum.

16. Modified cytotoxic T cells produced by stimulating said cells in an effective amount of IL-15.

17. The cells according to claim 16 selected from the group consisting of TALL-104 cells and TALL-103/2 cells.

18. Modified cytotoxic T cells produced by the method of claim 1.

19. The cells according to claim 18 selected from the group consisting of TALL-104 cells and TALL-103/2 cells.

20. Modified cytotoxic T cells produced by the method of claim 4.

21. The cells according to claim 20 selected from the group consisting of TALL-104 cells and TALL-103/2 cells.